

Claims

- [c1] An apparatus for transferring pipette tips comprising:
a transfer plate having a plurality of plug members for engaging pipette tips; and
a frame assembled and interlocked with the transfer plate, said frame having openings contained therein for inserting the plugs therethrough and a plurality of small protuberances extending into the openings.
- [c2] The apparatus of claim 1 wherein the plug members are arranged in parallel lines separated by elongated slots.
- [c3] The apparatus of claim 2 wherein the openings in the frame comprise elongated slots separated by elongated rails, which fit in the elongated slots.
- [c4] The apparatus of claim 1 wherein said transfer plate and the frame are comprised of a moldable plastic.
- [c5] The apparatus of claim 1 wherein the plug members are hollow.
- [c6] The apparatus of claim 1 wherein sliding the transfer plate relative to the frame functions to move the apparatus in a retained and a released position when the plugs

have pipette tips positioned thereon.

- [c7] The apparatus of claim 6 wherein the protuberances contact pipette tips positioned over the plugs when the apparatus is in the retained position.
- [c8] The apparatus of claim 6 wherein the protuberances are located between the plugs when the apparatus is in a released position.
- [c9] The apparatus of claim 1 wherein the transfer plate further comprises at least one tab member for sliding the frame relative to the transfer plate.
- [c10] The apparatus of claim 1 wherein the transfer plate and the frame are generally rectangular in shape.
- [c11] The apparatus of claim 1 wherein the transfer plate and the frame are removable from one another.
- [c12] An apparatus for transferring pipette tips comprising:
a first generally rectangular shaped member having a plurality of plug members extending therefrom wherein the plug members are positioned in rows that are separated by elongated slots: and
a second generally rectangular shaped member having a plurality of elongated openings contained therein that are separated by elongated rails and a plurality of small

projections extending from the rails and into the elongated openings, wherein the first and second rectangular shaped members are assembled and interlocked with one another when the plug members of the first rectangular shaped member are inserted through the elongated openings of the second rectangular shaped member.

- [c13] The apparatus of claim 12 wherein said first and second generally rectangular shaped members are comprised of a moldable plastic.
- [c14] The apparatus of claim 12 wherein the plug members are hollow.
- [c15] The apparatus of claim 12 wherein the transfer plate further comprises at least one tab member for sliding the frame relative to the transfer plate.
- [c16] The apparatus of claim 12 wherein the projections are positioned to contact a plurality of pipette tips, which fit over the plugs to retain the pipette tips in place on the apparatus for transfer.
- [c17] The apparatus of claim 12 wherein the projections are positioned between the plugs so that a plurality of pipette tips fitted over the plugs can be easily removed from the plugs and released from the apparatus.

[c18] A method for transferring pipette tips comprising the steps of:

- providing a transfer plate having a plurality of plugs extending therefrom for retaining pipette tips;
- providing a frame having openings contained therein and a plurality of small projections extending into the openings;
- assembled and interlocked the transfer plate with the frame such that the plugs in the transfer plate extend through, and traverse back and forth within, the openings in the frame;
- inserting the plugs in the transfer plate into a plurality of pipette tips;
- retaining the pipette tips onto the plugs by sliding the frame relative to the transfer plate so that the small projections of the frame contact an outer surface of the pipette tips;
- transferring the pipette tips to another location; and
- releasing the pipette tips from the plugs in the transfer plate by sliding the frame relative to the transfer plate so that the small projections of the frame do not contact the pipette tips.

[c19] The method of claim 18 wherein the steps of providing the transfer plate and the frame comprise the step of forming the transfer plate and the frame from a mold-

able plastic.

[c20] The method of claim 18 wherein the step of inserting the plugs into a plurality of pipette tips comprises the step of holding the transfer plate with the plugs facing downward and pressing the transfer plate against a plurality of pipette tips so that the plugs are placed in openings of the pipette tips.